



plantuml in orgmode

drawing in plain text

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Introduction

PlantUML in Orgmode

This file demonstrates:

- How to draw in UML with plantuml in orgmode
- And create PDF slides from orgmode

Emacs and Orgmode version

Firstly, let's check Emacs¹ and Orgmode² version:

```
(concat (emacs-version)
        "\nOrgmode " (org-version))
```

GNU Emacs 28.0.50 (build 7, x86_64-w64-mingw32)
of 2021-07-15
Orgmode 9.4.4

¹<https://www.gnu.org/software/emacs/>

²<https://orgmode.org/>

Emacs Config

You may need to use my emacs config:

```
# backup existing emacs config
cd ~ && mv .emacs .emacs-backup && mv .emacs.d .emacs.d-backup
# clone this config
git clone https://github.com/kimim/kimim-emacs
# copy default .emacs to ~
cp kimim-emacs/.emacs ~
```

Install PlantUML

Download plantuml.jar³, and set jar-path:

```
(require 'url-handlers)
(require 'ob-plantuml)
(url-copy-file "https://nchc.dl.sourceforge.net/project/plantuml/plantuml.jar"
              "./plantuml.jar" t)
(setq org-plantuml-jar-path "./plantuml.jar")
```

³<https://plantuml.com/>

TeXLive and Beamer Theme

Install TeXLive⁴ to <texlive-path> and clone beamertheme-kimim⁵, and update T_EX cache:

```
git clone https://github.com/kimim/beamertheme-kimim \  
  <texlive-path>/texmf-local/tex/latex/beamertheme-kimim  
mktexlsr
```

⁴<http://tug.org/texlive/>

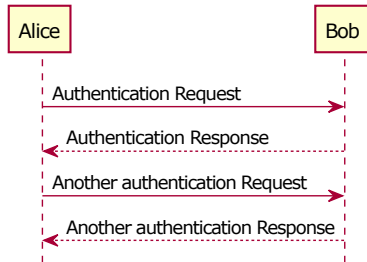
⁵<https://github.com/kimim/beamertheme-kimim>

PlantUML Diagrams

Sequence Diagram

Let's draw a simple sequence diagram with this plantuml code:

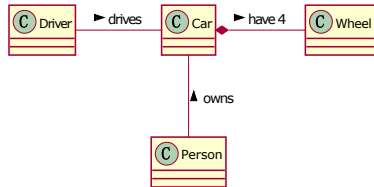
```
@startuml
hide footbox
hide unlinked
Alice -> Bob: Authentication Request
Bob --> Alice: Authentication Response
Alice -> Bob: Another authentication Request
Alice <-- Bob: Another authentication Response
@enduml
```



Class Diagram

A simple class diagram

```
@startuml
class Car
Driver - Car : drives >
Car *- Wheel : have 4 >
Car -- Person : < owns
@enduml
```



Conclusion

Key Takeaways

- Emacs is a long lasting, and wonderful text editor
- Orgmode is an awesome plain text format
- \LaTeX and Beamer is great typesetting tool
- Thus, drawing plantuml diagram with these tools is cool!

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